

REMARKS

Claims 1 through 16 were pending in this Application. Claim 1 has been amended and claims 5-8 and 13-16 have been cancelled. Care has been exercised to avoid the introduction of new matter. Indeed, adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure. Applicant submits that the present Amendment does not generate any new matter issue.

Claims 1 and 9 were rejected under 35 U.S.C. § 102(b) for lack of novelty as evidenced by Yasumoto et al. (JP 2000-243404, hereinafter “Yasumoto”). Applicant respectfully traverses.

Claim 1 was rejected under 35 U.S.C. § 102(b) for lack of novelty as evidenced by Knights et al. (WO 01/15255, hereinafter “Knights”). Applicant respectfully traverses.

In the fuel cell electrode according to claim 1 of the present application, the gas diffusion layer includes the first carbon particle and second carbon particle. As shown in Fig. 2 of the present application, by including the highly graphitized carbon particle 101 (the second carbon particle) in the gas diffusion layer 32, water existing in the gas diffusion layer 32 is efficiently discharged outside the air electrode 24. A gas path is secured in the proximity of the surface of the second carbon particle. Also, since the carbon particle 105 (the first carbon particle) has a hydrophilic surface, appropriate water retention is performed in the gas diffusion layer 32 when the first carbon particle is included in the gas diffusion layer 32 and a moisture discharging path is formed. Further, because of the existence of the first carbon particle and the second carbon particle, conductivity of the gas diffusion layer 32 is improved. Accordingly, the gas diffusion layer 32 attains excellent electrode characteristics because of the high moisture discharging efficiency, appropriate water retention and high conductivity.

Yasumoto and Knights do not disclose a gas diffusion layer including the first carbon particle and the second carbon particle. Thus, the fuel cell electrode according to amended claim 1 is different from that of the technology disclosed in Yasumoto, and Knights.

In addition, the Examiner indicated that the Knights reference discloses an electrode for fuel cell comprising: . . . and between 12% to 32% by weight of a hydrophobic additive, wherein the hydrophobic additive includes graphite. However, even though the Knights reference discloses between 12% to 32% by weight of PTFE (See claim 8), the Knights reference does not disclose between 12% to 32% by weight of graphite.

The above argued functionally significant difference between the claimed electrode and the electrode disclosed by Yasumoto or Knights undermines the factual determination that Yasumoto or Knights discloses an electrode, and hence a fuel cell containing such electrode, within the meaning of 35 U.S.C. § 102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicant, therefore, submits that the imposed rejections under 35 U.S.C. § 102(b) for lack of novelty as evidenced by Yasumoto or Knights are not factually viable and, hence, solicits withdrawal thereof.

Dependent claims 2-4 and 10-12 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Yasumoto in view of Terazono et al (U.S. Pat. App. Pub. No. 2002/0009626, hereinafter "Terazono"). Applicant respectfully traverses. Dependent claims 2-4 and 10-12 are free from the applied art in view of their respective dependencies from claim 1. The secondary references to Terazono does not cure the previously argued deficiencies of Yasumoto. Accordingly reconsideration and withdrawal of the rejection are solicited.

Claims 1 and 9 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Buche et al. (WO 03/058735, hereinafter “Buche”). Applicant respectfully traverses.

Buche suffers the same deficiency of Knights and Yasumoto. Buche does not disclose a gas diffusion layer including the first carbon particle and the second carbon particle. Thus, the fuel cell electrode according to amended claim 1 of the present application is different from that of the technology disclosed in Buche. The rejection is not legally viable and should be withdrawn.

Dependent claims 2-4 and 10-12 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Buche in view of Terazono et al (U.S. Pat. App. Pub. No. 2002/0009626, hereinafter “Terazono”). Applicant respectfully traverses. Specifically, claims 2-4 and 10-12 depend ultimately from independent claim 1. The secondary references to Terazono does not cure the previously argued deficiency of Buche. Accordingly, even if the applied references are combined as proposed by the Examiner, the claimed subject matter would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Dependent claims 5 and 13 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Buche in view of Koschany et al, (U.S. Pat. No. 6,451,470, hereinafter “Koschany”). Applicant respectfully traverses. Claims 5 and 13 have been cancelled and, therefore, the rejection is moot.

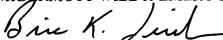
Dependent claims 6-8 and 14-16 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Buche in view of Terazono and further in view of Koschany. Applicant respectfully traverses. Claims 6-8 and 14-16 have been cancelled and, therefore, the rejection is moot.

Based upon the foregoing it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicant's representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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